REMARKS

In response to the Office Action dated November 18, 2008, Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-14 are pending in the present Application. Claims 1, 3, 4, 6, 7 and 9-14 are amended, leaving Claims 1-14 for consideration upon entry of the present amendments and following remarks.

Support for the claim amendments can at least be found in the specification, the figures, and the claims as originally filed.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Rejections under 35 U.S.C. §101

Claims 12-14 have been rejected under 35 U.S.C. 101 as being allegedly directed to non-statutory subject matter. In particular, the Examiner states that claims 12-14, as method claims, involve a judicial exception, which requires a corresponding analysis under the Office's Memorandum "Clarification of 'processes' under 35 USC 101" (published May 15, 2008) and the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (OG Notices: 22 November 2005). In the analysis, the Examiner finds that claims 12-14 are not statutory pursuant to 35 U.S.C. 101 because they are not tied to another statutory class and, further, they do not perform any physical transformation. The Applicants have amended claims 12-14 to recite features, which when combined with the method, sufficiently tie the method steps to another statutory class, i.e., a system or apparatus.

Further, the Examiner has rejected claims 12-14 under 35 U.S.C. 101 as failing to satisfy section 101 requirements that the claims must be for a practical application of the 101 judicial exception, which can be met when the claimed invention "transforms" an article or physical object to a different state or thing, or the claimed invention produces a useful, concrete, and tangible result. In this Action, the Examiner states that claims 12-14 fail the "tangible" portion of the requirement; however, the rejection may be overcome by appropriate amendment, such as reciting some manner of "output" of the claimed results.

In response, the Applicants have accordingly amended claim 12 to recite, *inter alia*, "the client system outputting the results of the genotyping analysis to a user at the client system via a graphical user interface of the client system." No new matter has been entered by this amendment. Support may be found, e.g., in Figure 1, which depicts a GUI 550 of the client 301/client system 321. Further support may be found on page 5, lines 1-4, as well as page 7, lines 1-8 and Figure 7, step 718, which provide for the results to be displayed at the client system.

The Applicants submit that claims 12-14 recite proper statutory subject matter pursuant to the provisions of 35 U.S.C. 101. Reconsideration and withdrawal of the rejections of claims 12-14 are respectfully requested.

The Examiner has further rejected claims 1-11 under 35 U.S.C. 101 for failing to satisfy the 101 judicial exception of "useful, concrete, and tangible" results. This rejection was issued for claims 1-11, which are system and storage medium claims, because of the corresponding rejections of claims 12-14 outlined above. The Applicants have amended independent claims 1 and 9 in a substantially similar manner as those made to claim 12 stated above.

For at least the reasons advanced above with respect to claim 12, the Applicants submit that claims 1 and 9, and their respective dependent claims 2-8, 10, and 11, recite proper statutory subject matter in accordance with 35 U.S.C. 101. Reconsideration and withdrawal of the rejections of claims 1-11 is respectfully requested.

The Examiner has further rejected claims 9-11 under 35 U.S.C. 101 as being allegedly nonstatutory subject matter. In particular, the Examiner states that claims 9-11 encompass an embodiment that includes a carrier wave signal, which is nonstatutory subject matter. The Applicants strongly disagree for the reasons set forth below.

Claim 9 recites, *inter alia*, a "computer readable medium for a server-client network system for genotyping analysis, the computer readable medium including computer executable instructions for causing a client system to perform logical operations." The computer readable medium recited in claims 9-11 are described throughout the specification and figures as computer processor-implemented programs in a client-server architecture. See, e.g., page 7, lines 25-32, the client engine 321 of Figure 1 and corresponding description, and page 6, lines 7-

12. Applicants respectfully submit that there is absolutely *no disclosure anywhere in the Applicants' specification, nor recitation in the applicable claims*, that any embodiment includes a carrier wave signal.

The Examiner cites U.S. Patent No. 6,090,555 to Fiedkowsky et al., and U.S. Patent No. 6,144,388 to Bornstein et al., in support of the rejection, simply because these references define a computer readable medium to include storage elements, such as a tape, floppy disk, a CD ROM, flash memory, system memory, hard drive, and *a carrier wave*. However, these definitions of a computer readable medium, which are provided by another reference, cannot properly be *transferred to, and incorporated into,* the instant application, particularly where there is no support, teaching, or suggestion, in the instant application that such computer readable medium includes a carrier wave. Such an interpretation by the Examiner in this case is without merit and is in clear error. Moreover, it is well settled that these types of *Beauregard* claims, as recited in claims 9-11, are recognized as proper statutory claims.

For at least these reasons, the Applicants submit that claims 9-11 recite proper statutory subject matter and respectfully request reconsideration and withdrawal of the outstanding rejections.

Rejections under 35 U.S.C. §112

Claims 1-14 have been rejected under 35 U.S.C. 112, first paragraph for allegedly reciting new matter. In particular, the Examiner states that the feature recited in claims 1, 9, and 12, "selecting an analysis algorithm relevant to a biochip identifier" lacks support in the specification. In addition, claims 1-14 have been rejected under 35 U.S.C. 112, second paragraph because the feature in claims 1, 9, and 12, which recites "selecting an analysis algorithm relevant to a biochip identifier" is indefinite.

In response, the Applicants have amended claims 1, 9, and 12 to remove this feature. In particular, claim 1 now recites, *inter alia*, "identifying a biochip used on the target sample, selecting an analysis algorithm from the analysis algorithm database for the identified biochip." No new matter has been entered by this amendment. Support may be found, e.g., on page 4, lines 8-13 and 19-34.

The Applicants submit that the amendment to claim 1 obviates the rejections under both 35 U.S.C. 112, first and second paragraphs. Independent claims 9 and 12 have been amended in a

substantially similar manner as the amendment to claim 1. For at least the reasons advanced above with respect to claim 1, the Applicants submit that claims 9 and 12 are also compliant with 35 U.S.C. 112, first and second paragraphs. Dependent claims 2-8, 10, 11, 13, and 14 are believed to be in compliance with 35 U.S.C. 112, first and second paragraphs at least for the reason that they depend upon 112-compliant base claims, respectively.

Because the amended claims are clear and are fully supported by the specification, the Applicants overcome the objection by amendment. Reconsideration and withdrawal of the rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. §102

Claims 1-14 are rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Osborne et al. (WO 01/16860 A2). Applicants respectfully traverse the rejections for the reasons set forth below.

Firstly, in the instant Office action at Pages 9 and 10, it is stated that the network system of Osborne "comprises a server that includes multiple databases required for the genetic analysis, *which are provided to the client* that receives the results of a microarray analysis and performs the genetic analysis," and that at least Figure 1 and pages 4-5 of Osborne provide evidence for such statement. In the instant Office action at Pages 10 and 11, it is further stated that "user facilities" and "central processing data facilities" of Osborne are respectively considered as "client" and "server," where the "central processing facilities" comprise the databases "provided to the client."

Referring to pages 4-5 of Osborne, Applicants find no disclosure of the databases of the database server/central processing facility of Osborne being "provided to the client," such as to specifically disclose that a client system **selecting an analysis algorithm from the analysis algorithm database** for the identified biochip, and **downloading the selected analysis algorithm from the analysis algorithm database** is *as arranged* in amended Claims 1, 9 and 12.

To the contrary of the conclusion in the Office action, with respect to the "client" (i.e., "user facilities") Osborne merely discloses access to the system allows the users(s) to look at both clinical and non-clinical information (page 4, lines 29-30), the user facilities may collect signals from an array, convert optical data into parameters, be connected to a data network, and

manipulate, search and analyze information (page 5, lines 1-6), and the user facilities communicate with the Web server supporting data analysis (page 5, lines 13-14). Osborne further discloses the central processing facility (application server) performs comparisons/analysis between parameters received by the Web server transmitted by the client/user facility and parameters supplied by the database server, and then results of the comparisons/analysis are returned to the user. (page 5, lines 19-30).

Nowhere in these citations does Osborne disclose the databases of the database server/central processing facility of Osborne being actively selected and downloaded by the client, such as to specifically disclose that a client system **selecting an analysis algorithm from the analysis algorithm database** for the identified biochip, and **downloading the selected analysis algorithm from the analysis algorithm database** is *as arranged* in amended Claims 1, 9 and 12.

Secondly, referring to page 12, lines 16-29 of Osborne quoted on Page 10 of the instant Office action, accounts for diagnostic users authorized and corresponding to the user sites are considered a part of the "client," and the database of rules is considered as "analysis algorithms." The Examiner states that for the diagnostic user of Osborne to perform the diagnostic processing, the user first *receives the systems from the server because they are "deployed."*

The user "*receiving* systems" as interpreting in the rejection details, in no way discloses the user "*selecting* a database set of rules" and "*downloading* a database set of rules" for the diagnostic processing of Osborne. Additionally, Applicants find no language of "deployment" of systems in Osborne, and will assume that this is merely interpretive language used in the rejection details, an and not quoted from Osborne. Even if the systems are considered as "deployed," this merely means that they are sent from somewhere (like the central processing facility), but in now way can this interpretive language be considered as disclosing the user/client actively "*selecting* the systems (database set of rules)" and "*downloading* a database set of rules" for the diagnostic processing of Osborne.

Again, nowhere in page 12, lines 16-29 of Osborne or in the interpretive rejection details at Pages 10 and 11 is there support for Osborne disclosing the databases of the database server/central processing facility of Osborne being "provided to the client," and especially the client actively selecting and downloading such database, such as to specifically disclose that a client system **selecting an analysis algorithm from the analysis algorithm database** for the

identified biochip, and **downloading the selected analysis algorithm from the analysis algorithm database** is *as arranged* in amended Claims 1, 9 and 12.

Since Osborne *fails to disclose* at least <u>a client system</u> **selecting an analysis algorithm from the analysis algorithm database** <u>for the identified biochip, and</u> **downloading the selected analysis algorithm from the analysis algorithm database** is *as arranged* in amended Claims 1, 9 and 12, it is respectfully submitted that Osborne does not anticipate at least amended Claims 1, 9 and 12. As Claims 1, 9 and 12, and Claims 2-8, 10, 11, 13 and 14 variously depending from Claims 1, 9 and 12, are not further rejected or objected, they are allowable.

Conclusion

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

Applicants hereby petition for any necessary extension of time required under 37 C.F.R. 1.136(a) or 1.136(b) which may be required for entry and consideration of the present Reply.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

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